DOCUMENT RESUME

ED 367 359 IR 054 907

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TITLE An Evaluation of Online Business Databases.
PUB DATE Nov 90
NOTE 41p.; M.L.S. Research Paper, Kent State University.
PUB TYPE Dissertations/Theses - Masters Theses (042)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS Business; Database Design; *Databases; Evaluation Criteria; Evaluation Methods; Online Searching; *Online Vendors
IDENTIFIERS *Business Information; DIALOG; Finance; *Timeliness

ABSTRACT

The purpose of this study was to evaluate the credibility and timeliness of online business databases. The areas of evaluation were the currency, reliability, and extent of financial information in the databases. These were measured by performing an online search for financial information on five U.S. companies. The method of selection for the companies chosen is also included. The research findings concern problems that were encountered in the research; the currency and reliability issues; and an overall evaluation of the databases. Appendices serve as a reference guide to the online business databases that supply extensive financial information. The appendices list the evaluated fields of the databases; items unique to each database; and a cross-reference of synonymous or aggregate terms. The conclusion of this paper is that Disclosure is the preferred overall database; it is the least expensive and has the most general financial information. (Contains 13 references.) (Author/JLB)

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AN EVALUATION OF ONLINE BUSINESS DATABASES

A Master's Research Paper submitted to the
Kent State University School of Library Science
in partial fulfillment of the requirements
for the degree Master of Library Science

by

Angela J. van der Heyde

November, 1990

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ABSTRACT

This research paper concerns the evaluation of four online business databases. The reasons for the selection of Dialog and the individual databases evaluated are also included.

The areas of evaluation were the currency, reliability and extent of financial information in the databases. These were measured by performing an online search for financial information of five U. S. companies. The method of selection for the companies chosen is also included.

The research findings include problems that were encountered in the research, the currency and reliability issues and an overall evaluation of the databases. Appendices are included to serve as a reference guide to the online business databases that supply extensive financial information. The appendices list the evaluated fields of the databases, items unique to each database and a cross reference of synonymous or aggregate terms.

The conclusion of this paper is that Disclosure is the preferred overall database. It is the least expensive and has the most general financial information.

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TABLE OF CONTENTS

LIST OF ILLUSTRATIONS ii

Chapter

I. INTRODUCTION 1

Problem Statement

Purpose of the Study

Limitations of the Study

II. REVIEW OF THE LITERATURE 2

III. METHODOLOGY 4

Introduction to the Research Plan

Type of Data Collected

Type of Online Service Selected

Reasons for Selection of Databases

Database Selection

Selection of Companies

Method of Collection

Method of Evaluation

IV. RESEARCH FINDINGS 11

Problems Encountered in the Research

Evaluation of Database Currency

Evaluation of Database Reliability

Overall Evaluation of the Databases

V. APPENDICES 17

A. Brief Description of Selected Databases

B. List of Evaluated Fields

C. Fields Unique to Disclosure

D. Fields Unique to Media General Plus

E. Fields Unique to Moody's Corporate Profiles

F. Cross Reference of Financial Terminology

G. List of Aggregate Terms

VI. BIBLIOGRAPHY 34

LIST OF ILLUSTRATIONS

Table		Page
1.	Criteria for Database Selection	8
2.	Update Frequency of Databases	12
3.	Overall Evaluation	16

CHAPTER 1. INTRODUCTION

Problem Statement

There is a need for an evaluation which examines the currency and reliability of online business databases. Although the vendors of the databases supply individual reference guides to their products they do not supply any information which compares and contrasts the various databases. Since some of the databases contain types of information the others do not, this can lead to the waste of time and money by using an inappropriate database.

Purpose of the Study

The purpose of this study was to evaluate the credibility and timeliness of online business databases. In addition, the appendices should prove to be a useful quick reference guide. Databases containing extensive financial information have been chosen for this study since the contents can be verified. Verifying the contents of these databases also yielded a more meaningful reference guide.

Limitations of the Study

The limitations of this study were that it only evaluated the numeric data of four financial business databases and that only Dialog databases were studied. Although a limited number of databases were evaluated, the techniques presented can easily be adapted to the evaluation of other types of databases.

CHAPTER 11. REVIEW OF THE LITERATURE

To become aware of the current literature concerning online business databases a literature search was performed. The search also would reduce the risk of duplication of work.

There were two types of articles that were reviewed for this paper. The first type of article were guides to particular databases and the second type were news items describing new developments in databases. As the news articles have little relevance for this study they have only been included in the bibliography.

Five of the articles reviewed were guides on how to use the databases. The first of these was "A Primer on Crossfile Searching in the Information Access Company Database" by Judith Sovner-Ribbler. This article explains the various databases that are included in the Information Access Company (IAC) Database. While it does include some business databases, they are not those evaluated in this study. There are some sample outputs of the databases and points of similarity between the IAC databases.

"Company Directories Online: Trinet and Dun's" by Marydee Ojala is a comparison between Trinet and three Dun's Databases; Dun's Marketing Services, Dun's Electronic Yellow Pages and Dun's Market Identifiers. Trinet and Dun's Electronic Yellow Pages are included in this study but the information gained from this article is not of the same type that was retrieved in the evaluation of the business databases. Once again, this article

is a description and demonstration of the types of data available through these databases.

Two articles were concerned with Moody's 5000 Plus database. One is a review of the database and the other is a comparison of Moody's database and Dialog OnDisc-Standard and Poor's Corporations. Both of these databases are CD-Rom products so while the information is close to that of the online equivalents, it does not give the indexes on which to search.

"How to Search the IFI Comprehensive Database Online... Tips and Techniques" by Nancy Lambert is a guide to the IFI Comprehensive Database of U.S. Chemical Patents (CDB). This article reviews a brief history of the CDB, gives indexing and other features of the database. It also includes search strategies and examples of information to be found. It has many examples and a sample search at the end of the article. While this article is closest to the proposed study, it only covers one database and that is in chemistry.

CHAPTER III. METHODOLOGY

Introduction to the Research Plan

This paper concerns financial information of online business databases. There are four parts to this research plan. They are the criteria for selection of each part of the plan, the selection of the various parts, the evaluation of the online databases and the conclusion.

The primary considerations for choosing an online database service were that it both be widely used and supply business databases. Choosing a widely used service is important because it will allow the results of this paper to be useful to a larger audience. Ease of use includes providing a reference guide to each database supplied by the vendor. This is helpful in selection of the databases for evaluation.

To provide a more reliable evaluation, the databases chosen must supply extensive financial information and be intended for the same audience. The currency of the information was measured by the frequency of update whereas the reliability of information was measured by source. For example, the information that comes from the U.S. Securities and Exchange Commission (SEC) was considered the most reliable source.

To test the financial information under different circumstances, five types of companies were selected. The types of companies that were included were split between theoretically stable corporate environments and potentially unstable corporate environments. Reasons for instability are international control,

buyouts, mergers or international subsidiaries. To cover all types of corporate ownership, the following four types of companies were researched:

1. U.S. Companies which have large a international subsidiary.
2. National U.S. Company.
3. Regional U.S. Company.
4. Recent takeover or attempt of a U.S. Company

Type of Data Collected

Two types of data were collected for this paper. One type was searchable field names of the selected databases and the other was the numeric data associated with the field names.

The searchable field names were identified and verified (see Appendix B). Standard financial terminology was used to determine if the field names were valid. Non-standard terminology was replaced by the standard form. The financial terms are cross referenced in Appendix F.

Next, the searchable fields of each database were compared with each other to avoid duplication of fields. Synonymous field names should mean the same thing in each database. When this comparison yielded a field name unique to a particular database, the field was eliminated from the evaluation because there will be no basis for comparison. As the unique terms are an integral part of this paper they are noted in Appendices C, D, and E. As previously stated the numeric data that was collected was the financial information upon which the databases were evaluated.

Type of Online Service Selected

Dialog was selected because it is a respected and widely used database service. Ease of use features include its Dialindex file. This assists the searcher in selecting the type of database to use by grouping the databases in subject categories.

Dialog also has reference guides for each database in the form "Blue Sheets" and "White Sheets." The "Blue Sheets" give an overview of the databases, their searchable fields and the output options. The "White Sheets" include this same information but also include a tutorial for use with the databases and definitions of the searchable fields.

Reasons for Selection of Databases

Dialindex was used to select the databases. One of Dialindex's business categories is Company Directories. This category consists of three sub-categories, PUBCO, USCO and ICO. PUBCO has eleven databases covering public U.S. companies, USCO has ten databases covering U.S. companies and ICO includes seven databases concerning international companies. As only U.S. companies were used in this paper, ICO was eliminated from the selection.

The databases in the PUBCO and USCO sub-categories are listed with the selection criteria in Table 1. The table lists whether each database has extensive financial information, the SEC as the source of information and the frequency of update.

Database Selection

Those databases lacking extensive financial information were excluded from the study. The other types of databases that were excluded were those with corporate descriptions, corporate affiliations and product information. This process of elimination left the following four databases.

Disclosure

Moody's Corporate Profiles

Media General Plus

D&B Financial Records

A brief description of the selected databases in Appendix A.

7

Table 1.

Criteria for Database Selection

Database Name	Extensive Financials	SEC?	Update
Moody's Corporate Profiles	Yes	Yes	Weekly
D&B Financial Records	Yes	No	Quarterly
Disclosure	Yes	Yes	Weekly
Media General Plus	Yes	Yes	Weekly
D&B Million Dollar Directory	No	No	Annually
S&P Register - Corporate	No	No	Quarterly
Trinet Company Database	No	Yes	Quarterly
Disclosure Spectrum	No	Yes	Quarterly
PTS Annual Reports Abstracts	No	Yes	Monthly
Investext	No	No	Weekly
Financial Times	No	No	Weekly
Businesswire	No	No	Continuously
D&B Market Identifiers	No	No	Quarterly
Corporate Affiliations	No	No	Quarterly
Moody's Corporate News	No	No	Weekly
Disclosure Management	No	No	Monthly
Thomas Register Online	No	No	Biannually
S&P News	No	No	Daily
Trinet U.S. Business	No	No	Quarterly
S&P Corporate Descriptions	No	No	Biweekly

Selection of Companies

Five types of companies were chosen to evaluate the databases. Honda, America was selected for an international parent with an U.S. subsidiary. Since about 50% of Hewlett Packard's sales are outside the U.S. it was the company chosen to represent the U.S. company with large international subsidiaries. The other three companies that were chosen were AT&T for the national U.S. company, Centerior for the regional company and Goodyear since the recent takeover attempt resulted in the sale of Goodyear Aerospace and the acquisition of large amount of debt.

Method of Collection

A list of field names was created from the Dialog "White Sheets" list of searchable terms. The numeric data associated with these fields was then retrieved from an online search.

Method of Evaluation

The databases were evaluated based on the financial information of the five companies retrieved from the online search. The data retrieved was in the format the gives full financial information while being conservative with the amount of time spent on the search.

The primary criterion for the evaluation is that all data gathered for each company should be the same regardless of source. Only currency and source are necessary to evaluate because without them any other information is of little use.

When discrepancies in the information are discovered the

reasons for them were identified. The reasons could be currency, source of information or other (eg. data entry errors). Company Annual Reports were then consulted to determine which database was correct. Evaluation results include any lists or summary tables created.

CHAPTER IV. RESEARCH FINDINGS

The research findings will be presented in four sections, the problems that were encountered in this project, an evaluation of the currency of each database,an evaluation of the reliability of each database and an overall evaluation and conclusion. The reliability section will include any errors found in the databases, inconsistencies between databases and an explanation for them and any unexplained discrepancies.

Two problems affected the intended research for this paper. Dun's Financial Records database was unauthorized to Library Science programs and the fact that Honda, America was not a U. S. subsidiary.

Dun's Financial Records is a highly respected database. However, due to its high expense, only a few areas of business can afford to use it. In any discussion of the database that was found, it was advised that the user should use another business database if possible. Unless highly detailed information is needed, such as a credit agency or bank would use, many of the other databases would suit the purpose.

Honda was chosen because it was the American subsidiary of an international company. Upon first examination of the data it was noticed that the financial data was quite different. Unlike the differences in the other companies, these differences were between thousands and millions. After further study of the output it was determined that some of the databases reported the figures in dollars while another reported the same information in

yen. This was concluded when a study of the ratios showed that they matched regardless of database. None of the databases mention the monetary units in which the figures were reported. This is typical of international subsidiaries.

Evaluation of database currency

The database search was performed on October 12, 1990. Both Media General Plus and Disclosure have weekly updates. The quarterly figures reported by each of three databases are equally current as illustrated in Table 2, but the extent of information supplied differs.

Table 2.

Update Frequency of Databases

	Dun's	Disc	Media	Moody's
Updated daily	N	N	Y	N
Updated weekly	N	Y	Y	N
Updated monthly	N	Y	Y	Y

Most of the data retrieved was dated the fiscal year-end of the company researched. This ranged from October 31, 1989 to December 31, 1989. The most recent quarterly data for each of the databases was the second quarter. The weekly data that was retrieved was for the week ending September 28, 1990. Media General had daily information dated October 5, 1990. Media General Plus and Moody's Corporate Profiles have quarterly summaries which include the Income Statement and stock

information while Disclosure also includes quarterly Balance Sheets.

Evaluation of database reliability

Types of errors found

Only three errors were found in studying the output from the databases search. Two of these came from Disclosure and one error came from Media General Plus. In two of the four companies that were studied, Disclosure quoted net property, plant and equipment the same as gross property, plant and equipment. This left no allowance for depreciation, although depreciation expense was on the income statement.

The other error found in Disclosure was in the computation of the five year growth rate. In Moody's Corporate Profiles, six years are used in the computation. It is the change between the years that yields the five year growth rate. Disclosure only uses five years of data. This gives Moody's and Disclosure different growth rates.

The error that was found in Media General Plus concerns interest coverage. The Dialog "White Sheets" for this database define interest coverage as Net Income plus Income taxes plus interest expense divided by interest expense. In the calculation however, income taxes are not included. This was consistent across the four companies researched.

Inconsistencies between databases

The inconsistencies that were found between the databases were reconciled and are included in Appendices F and G. The

types of inconsistencies that were found included differing terminology for the same financial account and the difference between individual and aggregate amounts. The aggregate amounts were found in Media General Plus and Moody's Corporate Profiles while the individual amounts were in Disclosure. The most frequent place for this to happen was in the assets and liabilities. Even with the reconciliation, the inclusion of accounts in the asset and liabilities groupings were not consistent between companies so these figures require closer investigation. Cost of goods was another problem area which had two types of inconsistencies. The first was terminology between cost of goods and cost of sales while the other was the inclusion of expenses. As this affects the gross profit figure and amounts like income before depreciation and amortization, this account also needs closer investigation.

Unexplained Discrepancies

Deferred income taxes differed between Moody's and Media General for AT&T while Disclosure matched the annual report. Receivables differed between the three databases but because there are many items that could theoretically be included in the receivables figure, none of these three figures could be verified.

Overall Evaluation

Disclosure is the least expensive database and it also has the most general financial data. Media General Plus and Moody's Corporate Profiles have more stock information but they are also

more expensive. As it was impossible to search on Dun's Financial Records, Media General Plus was the only database that gave industry comparisons. Table 3 will illustrate the costs and other features of the four databases.

Table 3.

Overall Evaluation

	Dun's	Disc	Media	Moody's
Cost per Hour	$141.00	$45.00	$84.00	$60.00
Cost of Online/Offline Print	89.00	20.00	6.50	4.00
Number of errors found	*	2	1	0
Updated daily	N	N	Y	N
Updated weekly	N	Y	Y	N
Updated monthly	N	Y	Y	Y
Unexplained discrepancies	*	0	1	2
Copyright of information	Y	#	#	Y

The overall choice for use is the Disclosure database because it is the least expensive and the most comprehensive for general corporate financial information.

* This does not apply because the database was not searchable.

\# No information could be found.

CHAPTER V. APPENDICES

Appendix A

Brief Description of Selected Databases

Dialog File 100 Disclosure Database.

Disclosure covers detailed financial and descriptive corporate information on over 12,000 corporation. The source of information for this database is filings from U.S. Securities and Exchange Commission (SEC). The reasons for inclusion in the study are the weekly updates, the inclusion of historical data and the reliability of the data.

Dialog File 519 D&B Dun's Financial Records.

Dun's Financial Records includes financial ratios, comparisons to industry norms and corporate descriptions of over 670,000 U.S. businesses. The primary source of the information is personal interviews by business analysts. The reason for inclusion in the evaluation are the large number of records and the ratio analysis information.

Dialog File 555 Moody's Corporate Profiles.

This file contains financial and descriptive information on 4,000 public corporations. They only cover the New York and American Stock Exchanges and some of the Over the Counter market. The sources of the data are SEC filings, annual reports and news

items. It has been included in this study as part of the comparison of detailed financial information between similar databases.

Dialog File 516 Media General Plus.

This file contains extensive financial information on 5,100 public companies. It is updated weekly and has historical information for five years. It also has fifteen quarters of historical information. The sources for the information are from company annual reports, SEC filings, prospectuses and news items.

Appendix B

List of evaluated fields

Balance Sheet:

Accumulated depreciation

Cash and marketable securities

Gross fixed assets

Intangibles

Inventories

Long term debt

Minority interest (liability)

Net fixed assets

Other current assets

Other current liabilities

Other long term liabilities

Other non-current assets

Receivables

Retained earnings

Shareholders equity

Total assets

Total current assets

Total current liabilities

Total liabilities

Income Statement:

Cost of goods

Depreciation

Fixed charges

Income before taxes

Income from continuing operations

Income taxes

Net income

Net sales

Operating income

Other income net

Ratios:

Current ratio

Debt/equity ratio

Dividend payout ratio

Inventory turnover

Leverage ratio

Quick ratio

Receivables/day sales

Return on assets (%)

Return on equity (%)

Return on invested capital

Sales growth rate (5 years)

Times interest earned

Stock Information:

Closing price (fiscal year)

Closing price (monthly)

Closing price (quarterly)

Closing price (weekly)

Common dividends per share (fiscal year)

Common dividends per share (quarterly)

Common stock

Earnings per share

High price (fiscal year)

Indicated annual dividend

Low price (fiscal year)

Market value of common stock

Number of common stockholders

Outstanding shares (fiscal year)

Outstanding shares (quarterly)

Outstanding shares (weekly)

Volume (fiscal year)

Volume (quarterly)

Volume (weekly)

Update Information:

Date of latest annual data

Date of latest quarterly data

Date of latest weekly data

Appendix C

Fields unique to Disclosure

Balance Sheet:

Accounts payable

Capital surplus

Cash

Convertible debt

Current long term debt

Current portion of capital leases

Deferred charges (assets)

Deferred charges (liabilities)

Deposits and other assets

Finished goods

Investments and advances to subsidiaries

Marketable securities

Mortgages

Non-current capital leases

Notes payable

Notes receivable

Other liabilities

Shareholders equity (quarterly)

Total assets (quarterly)

Total current liabilities (quarterly)

Total liabilities and net worth

Total liabilities (quarterly)

Cash Flow Statement:

Cash or equivalents - end of the year

Cash or equivalents - beginning of the year

Cash provided by (used in) discontinued operations

Effect of exchange rate on cash

Increase (decrease) in bank and other borrowing

Increase (decrease) in investments

Issuances (purchases) of equity securities

Issuances (repayment) of debt securities

Net cash provided by (used in) in financing activities

Net cash provided by (used in) investing activities

Net cash provided by (used in) operating activities

Net increase (decrease) in assets(liabilities)

Other cash inflow (outflow)

(Acquisition)disposal of subsidiaries

(Increase) decrease in property and plant

Income Statement:

Accrued expenses

Cost of goods (quarterly)

Extraordinary items and discontinued operations

Gross profit

Gross profit (quarterly)

Investment gains (losses)

Minority interest income(loss)

R&D expenditures

Ratios:

Current debt/equity

Expenses/sales

Income growth ratio (5 yrs)

Inventory/day sales

Net income/net sales

Net sales/cash

Net sales/current assets

Net sales/employees

Net sales/plant and equipment

Net sales/total assets

Net sales/working capital

Pretax income/common equity

Pretax income/invested capital

Pretax income/net sales

Pretax income/total assets

Price/earnings ratio

Receivables turnover

R&D expenditures/net income

R&D expenditures/net sales

R&D expenditures/number of employees

Total debt/equity

Total liabilities/invested capital

Total liabilities/common equity

Total liabilities/total assets

Stock Information:

Dividend record date

Dividends and other distributions

Preferred stock

Treasury stock

Update Information:

Date of changed or new record

Fiscal year end

Appendix D

Fields unique to Media General Plus

Balance Sheet:

Preferred stock equity

Short term debt (payables)

Industry Comparisons:

Asset turnover (company/industry)

Change vs S&P 500 last 52 weeks

Change vs S&P 500 last week

Change vs S&P 500 year to date

Current ratio (company/industry)

Debt/equity (company/industry)

Earnings (company/industry)

Effective tax rate (company/industry)

EPS (company/industry)

Leverage ratio (company/industry)

Post-tax profit (company/industry)

Pretax profit (company/industry)

Price (company/industry)

Price/book (company/industry)

P/E ratio (company/industry)

Return on equity (company/industry)

Sales (company/industry)

Cash Flow Information:

Cash flow

Cash flow/share

Working capital

Income Statement:

12 month sales

Income from continuing operations

Income from discontinuing operations

Income from total operations

Income taxes (deferred)

Income taxes (expense)

Income (last quarter)

Minority interest (expense)

Other operating expenses

Pretax income

Sales (last quarter)

Selling & general expenses

Ratios:

Asset turnover

Average price/earnings ratio

Dividend growth rate (5 years)

EPS growth rate % (5yrs)

Price/book ratio (current)

Price/book ratio (latest fiscal year)

Price/cash flow (current)

Price/earnings ratio (current)

Price/earnings ratio (latest fiscal year)

Price/sales ratio (current)

Price/sales ratio (latest fiscal year)

Profit margin-post tax

Profit margin-pretax

Short interest ratio

Stock Information:

10 week moving average price

12 month earnings from total operations

12 month EPS from total operations

20 day volume moving average

200 day moving average price

Average Daily Volume

Dividend payment method

Dividend yield

Dollar volume last 4 weeks

Down market beta

EPS-Continuing operations (diluted)

EPS-continuing operations (primary)

EPS-discontinued operations (diluted)

EPS-discontinued operations (primary)

EPS-primary (quarterly)

EPS-total operations (diluted)

EPS-Total operations (primary)

Ex-dividend date (latest)

Latest close as a percentage of 200 day moving average

Preferred dividend per share

Price change last 52 weeks

Price change last week

Price change year to date

Price momentum

Split value (latest)

Up beta

Weekly volume as percentage of shares outstanding

Update Information:

Date of changed annual financials

Date of changed quarterly financials

Latest annual EPS from total operations

Latest annual income from total operations

Latest annual sales

Appendix E

Fields unique to Moody's Corporate Profiles

Balance Sheet:

Capital lease obligations

Net current assets

Income Statement:

Revenues

Ratios:

Operating profit margin (%)

Price/earnings ratio (high)

Price/earnings ratio (low)

Stock Information:

12 month price score

7 year price score

Average shares

Average yield

Book value

Appendix F
Cross Reference of Financial Terminology

Standard	Disc	Media	Moody's
Balance Sheet:			
Accumulated depreciation	x	x	
Depreciation reserve			x
Other long term liabilities	x		
Other non-current liabilities		x	
Shareholder's equity	x	x	
Net stockholder's equity			x
Common stock equity		x	
Income Statement:			
Net sales	x		
Sales		x	
Revenues			x
Cost of goods	x	x	
Cost of sales			x
Income before depreciation & amortization		x	
Operating income			x
Depreciation & amortization	x		
Depreciation		x	
Fixed charges		x	
Interest expense	x		
Selling & general expense		x	
Selling, general & administrative expense	x		
Provision for income taxes	x		
Income tax (expense)		x	
Income before taxes	x		x
Pretax income		x	
Income from continuing operations		x	
Income before extraordinary items	x		
Income from discontinued operations	x		
Non-operating income		x	
Other income, net		x	

31

Net income	x		
Income from total operations		x	
Ratios:			
Leverage Ratio		x	
Total assets/equity	x		
Debt/equity		x	
Long term debt/equity	x		
Return on assets		x	x
Net income/total assets	x		
Return on invested capital		x	
Net income/invested capital	x		
Return on stock equity		x	
Return on equity			x
Net income/common equity	x		
Times interest earned	x		
Interest coverage		x	

Appendix G.

List of Aggregate Terms

Cash and market securities:

Disclosure - listed separately
Media General - listed under cash
Moody's - listed as so

Short terms debt (Media)
= Notes payable + Current long term debt (Disclosure)

Other current liabilities (Media)
= Accounts payable + Accrued expenses + Income tax (current portion) + Other current liabilities (Disclosure)

CHAPTER V. BIBLIOGRAPHY

Downes, John and Jordon Elliot Goodman. Dictionary of Finance and Investment Terms. 2d. ed. New York: Barron's Educational Series. 1987.

Hawkings, Donald T. and Louise R. Levy. "Front End Software or Online Database Searching." Online. (November 1985): 30-37.

Jotischky, Helma. Business Information Online for the Coatings Industry. London: Paint Research Association. 1986.

Kellough, Jean. "Moody's 5000+ and Dialog OnDisc Standard and Poor's Comparisons: A Comparison of Two Full-Text Business Databases." Laserdisk Professional. (November 1989): 78-89.

Kieso, Donald E. and Jerry J. Weygandt. Intermediate Accounting. 3d. ed. New York: John Wiley & Sons. 1980.

Lambert, Nancy. "How to Search the IFI Comprehensive Database Online... Tips and Techniques." Database. (December 1987): 46-59.

Monk, Thomas J. and Kenneth M. Landis. "On-line data bases put the information at your fingertips." Corporate Cashflow. (December 1988): 56-57.

Morrow, Blaine. "Moody's 5000 Plus" CD-Rom Librarian. (October 1989): 32-35.

Ojala, Marydee. "Company Directories Online: Trinet and Dun's." Online. (September 1988): 85-90.

_____ "Finding Information on Small Business." Database. (August 1989): 108-111.

_____ "SIC Codes Revisited: Dun's Goes Marching Two by Two." Online. (November 1989): 84-89.

O'Leary, Mick. "Big Guns in the Hunt for Private Companies." Information Today. (July/August 1988): 3,4,12.

Sovner-Ribbler, Judith. "A Primer on Crossfile Searching in the Information Access Company Databases." Database. (February 1988): 34-40.